

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	0	("semiconductor and substrate and groove and film and insulating surface").PN.	USPAT; USOCR	OR	OFF	2005/07/07 08:37
S2	7261	semiconductor and substrate and groove and film and insulating surface	USPAT	OR	OFF	2005/07/06 13:32
S3	902	semiconductor and substrate and groove and film and insulating surface and crack	USPAT	OR	OFF	2005/07/06 13:32
S4	278	semiconductor and substrate and groove and film and insulating surface and crack and fill	USPAT	OR	OFF	2005/07/06 13:41
S5	233	semiconductor and substrate and groove and film and insulating surface and (crack or damage) and fill and die	USPAT	OR	OFF	2005/07/06 14:16
S8	2953	(257/127,170,244,622,E21.131,E21.238,E21.585).CCLS.	USPAT; USOCR	OR	OFF	2005/07/06 14:22
S9	42	S8 and (groove near parallel)	USPAT	OR	OFF	2005/07/06 14:22
S10	80	S8 and (groove or channel or trench) and (plural or multiple or two or three or several) and "semiconductor element"	USPAT	OR	OFF	2005/07/06 15:19
S11	8048	S8 and (groove or channel or trench) "interlayer insulating film"	USPAT	OR	OFF	2005/07/06 15:02
S12	83	S8 and (groove or channel or trench) and "interlayer insulating film"	USPAT	OR	OFF	2005/07/06 15:02
S13	1551	S8 and (groove or channel or trench)	USPAT	OR	OFF	2005/07/06 15:53
S14	64	S8 and ((groove or channel or trench) near perpendicular)	USPAT	OR	OFF	2005/07/06 15:27
S15	68	S8 and ((groove or channel or trench or via) near perpendicular)	USPAT	OR	OFF	2005/07/06 15:28
S16	25	S8 and (perpendicular adjacent (groove or channel or trench or via))	USPAT	OR	OFF	2005/07/06 15:52
S17	25	S8 and (perpendicular adjacent (groove or channel or trench or via))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/07/06 15:28
S18	0	257/758.CCLS	USPAT	OR	OFF	2005/07/06 15:52
S19	1933	(257/758).CCLS.	USPAT; USOCR	OR	OFF	2005/07/06 15:52
S20	822	S19 and (groove or channel or trench)	USPAT	OR	OFF	2005/07/06 15:53

S21	468	(257/730).CCLS.	USPAT; USOCR	OR	OFF	2005/07/07 08:38
S22	286	(257/790).CCLS.	USPAT; USOCR	OR	OFF	2005/07/07 08:42
S23	523	((257/790) or (257/637)).CCLS.	USPAT; USOCR	OR	OFF	2005/07/07 08:43
S24	527	((257/790) or (257/637)).CCLS.	US-PGPUB; USPAT	OR	OFF	2005/07/07 08:44
S25	245	(257/637).CCLS.	US-PGPUB; USPAT	OR	OFF	2005/07/07 08:59
S26	818	scribe, edge pattern, dic\$3	US-PGPUB; USPAT	AND	OFF	2005/07/07 09:00
S27	10	scribe, "edge pattern", dic\$3	US-PGPUB; USPAT	AND	OFF	2005/07/07 09:18
S28	527	scribe dic\$3 crack\$3	US-PGPUB; USPAT	AND	OFF	2005/07/07 09:19
S29	3414	438/622	US-PGPUB; USPAT	OR	OFF	2005/07/07 09:43
S30	3018	((438/622) or (257/758)).CCLS.	USPAT; USOCR	OR	OFF	2005/07/07 09:44
S31	156	S30 and crack	US-PGPUB; USPAT	OR	OFF	2005/07/07 09:46
S32	15	S30 and "seal ring"	US-PGPUB; USPAT	OR	OFF	2005/07/07 09:52
S33	15	S30 and "seal ring"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/07/07 10:39
S34	137	S30 and "seal"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/07/07 09:52
S35	220	S30 and "ring"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/07/07 09:52
S36	0	("6876064").URPN.	USPAT	OR	OFF	2005/07/07 10:38
S37	4	("20030218254"   "6100589"   "6365958"   "6670710").PN. OR ("6876064").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2005/07/07 10:39

S38	38	("20020024115"   "20020175415"   "20030218254"   "20040051177"   "4472730"   "4949162"   "5027188"   "5117280"   "5291066"   "5300814"   "5448112"   "6100589"   "6137155"   "6365958"   "6605874"   "6670710"   "6707156").PN. OR ("5763936"   "6861754"   "6861755"   "6870265"   "6876064").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2005/07/07 11:12
S39	428	(257/632).CCLS.	USPAT; USOCR	OR	OFF	2005/07/07 11:18
S40	3	S39 and "seal ring"	USPAT	OR	OFF	2005/07/07 11:16
S41	3	S39 and "seal ring"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/07/07 11:16
S42	1826	(257/629,632,635,637).CCLS.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/07/07 11:19
S43	4	S42 and "seal ring"	USPAT	OR	OFF	2005/07/07 11:19
S44	4	S42 and "seal ring"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/07/07 12:59
S45	23	"I22" and (seal near4 ring)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/07/07 13:00
S46	31	"s42" and (seal near4 ring)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/07/07 13:01
S47	1826	(257/629,632,635,637).CCLS.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/07/07 13:01
S48	5	S47 and (seal near4 ring)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/07/07 13:04

S49	78	S47 and crack	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/07/07 13:19
S50	175	S47 and ("seal ring" or "guard ring")	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/07/07 13:38
S51	6	S47 and (("dual" or "double" or "two") near5 ("seal ring" or "guard ring"))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/07/07 13:43
S52	7	S47 and ("seal ring" or "guard ring") and crack	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/07/07 13:45
S53	282	S47 and ring	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/07/07 14:54
S54	36435	"seal ring"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/07/07 14:54
S55	36435	seal adj ring	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/07/07 14:54
S56	1462	"seal ring" and semiconductor	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/07/07 14:55
S57	864	"seal ring" and semiconductor and substrate	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/07/07 14:55
S58	454	"seal ring" and semiconductor and substrate and insulat\$4	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/07/07 15:03

S59	39	("seal rings" and (not "seal ring")) and semiconductor and substrate and insulat\$4	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/07/07 15:20
S60	1933	(257/758).CCLS.	USPAT; USOCR	OR	OFF	2005/07/07 15:20
S61	104	S60 and seal	USPAT	OR	OFF	2005/07/07 15:23
S62	0	S60 and (seal%3 near5 ring\$3)	USPAT	OR	OFF	2005/07/07 15:24
S63	13	S60 and ("seal ring")	USPAT	OR	OFF	2005/07/07 15:24
S64	17	S60 and (seal\$3 near5 ring\$3)	USPAT	OR	OFF	2005/07/07 15:24
S65	27483	(semiconductor or die or dice or chip or IC) and (ring or protect\$3 or guard\$3 or seal\$3) with (scrib\$3 or cut\$3 or dic\$4)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/07/08 09:06
S66	27483	(semiconductor or die or dice or chip or IC) and ((ring or protect\$3 or guard\$3 or seal\$3) with (scrib\$3 or cut\$3 or dic\$4))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/07/08 08:10
S67	22419	(semiconductor or die or dice or chip or IC) and ((ring or protect\$3 or guard\$3 or seal\$3) with (scrib\$3 or cut\$3 or dic\$4))	US-PGPUB; USPAT	OR	OFF	2005/07/08 08:10
S68	15715	(semiconductor or die or dice or chip or IC) and ((ring or protect\$3 or guard\$3 or seal\$3) with (scrib\$3 or cut\$3 or dic\$4))	USPAT	OR	OFF	2005/07/08 08:11
S69	4121	(257/620,758,774,775,776).CCLS.	USPAT; USOCR	OR	OFF	2005/07/08 08:11
S70	162	S69 and S65	USPAT	OR	OFF	2005/07/08 08:11
S71	1	("6734090").PN.	USPAT; USOCR	OR	OFF	2005/07/08 09:01
S72	1	("6509622").PN.	USPAT; USOCR	OR	OFF	2005/07/08 09:04
S73	145	(257/484).CCLS.	USPAT; USOCR	OR	OFF	2005/07/08 09:04
S74	0	("l18andl1").PN.	USPAT; USOCR	OR	OFF	2005/07/08 09:04
S75	1	S73 and S65	USPAT	OR	OFF	2005/07/08 09:05
S76	47	(semiconductor or die or dice or chip or IC) and (ring or protect\$3 or guard\$3 or seal\$3) with (scrib\$3 or cut\$3 or dic\$4) and "edge protection"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/07/08 09:10

S77	47	((semiconductor or die or dice or chip or IC) and (ring or protect\$3 or guard\$3 or seal\$3) with (scrib\$3 or cut\$3 or dic\$4)) and "edge protection"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/07/08 09:11
S78	424	((semiconductor or die or dice or chip or IC) and (ring or protect\$3 or guard\$3 or seal\$3) with (scrib\$3 or cut\$3 or dic\$4)) and (edg\$3 near (protect\$3 or barrier or guard\$3))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/07/08 09:12
S79	406	((semiconductor or die or dice or chip or IC) and (ring or protect\$3 or guard\$3 or seal\$3) with (scrib\$3 or cut\$3 or dic\$4)) and (edg\$3 near (protect\$3 or barrier or guard\$3))	US-PGPUB; USPAT	OR	OFF	2005/07/08 09:12
S80	314	((semiconductor or die or dice or chip or IC) and (ring or protect\$3 or guard\$3 or seal\$3) with (scrib\$3 or cut\$3 or dic\$4)) and (edg\$3 near (protect\$3 or barrier or guard\$3))	USPAT	OR	OFF	2005/07/08 09:34
S81	92	((semiconductor or die or dice or chip or IC) and (ring or protect\$3 or guard\$3 or seal\$3) with (scrib\$3 or cut\$3 or dic\$4)) and (edg\$3 near (protect\$3 or barrier or guard\$3))	US-PGPUB	OR	OFF	2005/07/08 09:34
S82	17	("5530280"   "5763936"   "5831330"   "5834829"   "5936260"   "6111419").PN. OR ("6365958").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2005/07/08 12:59
S83	1	("5414297").PN.	USPAT; USOCR	OR	OFF	2005/07/08 14:42
S84	1	("6870265").PN.	USPAT; USOCR	OR	OFF	2005/07/08 16:04
S85	1	("5270256").PN.	USPAT; USOCR	OR	OFF	2005/07/08 16:06
S86	1	("5831330").PN.	USPAT; USOCR	OR	OFF	2005/07/08 16:06
S87	1	("5270256").PN.	USPAT; USOCR	OR	OFF	2005/07/11 08:46